ENGLISH MEASUREMENT VERSION

# AT048FM Fiber - Armored - Double Jacket

For more Information please call

1-800-Belden1

## Description

The BelOptix® Public Network Fiber Series addresses the converging technologies of CATV, Broadband and Telephony providing cable solutions for longhaul, local exchange and MAN/WAN applications.

## Physical Characteristics (Overall):

| | |
|---|---|
| Fiber Type | Single Mode 125/245 Micron, Non-Dispersion Shifted |
| Number of Fibers | 48 |
| Core Diameter | 8.3 |
| Mode Field Diameter @ 1310nm | 9.2 +/- 0.4 |
| Mode Field Diameter @1550nm | 10.5 +/- 1.0 |
| Clad Diameter | 125 +/- 1 |
| Clad Non-Circularity | < 1.0 µm |
| Core-clad Concentricity Error | < 0.8 µm |
| Primary Coating Material | Acrylate |
| Primary Coating Diameter | 245 +/- 10 |

Fiber Color Code Chart

| Color |
|---|
| Blue |
| Orange |
| Green |
| Brown |
| Gray |
| White |
| Red |
| Black |
| Yellow |
| Violet |
| Rose |
| Aqua |

| | |
|---|---|
| Buffer Tube Diameter | 3.0 |
| Buffer Tube Material | PBT - Polybutylene Terephthalate |
| Buffer Tube Filling Material | Synthetic Thixotropic Gel |

Buffer Tube Color Code Chart

| Number | Color |
|---|---|
| 1 | Blue |
| 2 | Orange |
| 3 | Green |
| 4 | Brown |

**Inner Jacket:**

| | |
|---|---|
| Inner Jacket Ripcord | Polyester |

**Outer Jacket:**

Outer Jacket Material

| Outer Jacket Material |
|---|
| HDPE - High Density Polyethylene |

| | |
|---|---|
| Outer Jacket Nominal Wall Thickness | .055 |
| Outer Jacket Ripcord | Aramid |

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| | |
|---|---|
| Outer Jacket Color | Black |
| **Strength Member:** | |
| Strength Member Material | Fiberglass Epoxy Rod, Fiberglass Yarn |
| **Armor:** | |
| Armor Type | Corrugated |
| Armor Material | Steel |
| Armor Thickness | .006 |
| **Overall Cabling:** | |
| Overall Cabling Fillers | Foam Polypropylene |
| Overall Nominal Diameter: | 0.581 in. |

## Mechanical Characteristics (Overall):

| | |
|---|---|
| Operating Temperature Range | -40°C To +75°C |
| Storage Temperature Range | -40°C To +75°C |
| Bulk Cable Weight: | 136 lbs/1000 ft. |
| Min. Bend Radius (Install): | 11.750 in. |
| Min. Bend Radius for Long Term Application: | 5.900 in. |
| Crush Resistance | Passes TIA/EIA 455-41 |
| Impact Resistance | Passes TIA/EIA 455-25 |
| Solar Radiation Resistance | High |
| Water Penetration | Passes TIA/EIA 455-82 |
| Compound Flow | Passes TIA/EIA 455-81 |
| Cyclic Flexing | Passes TIA/EIA 455-105 |
| Twist Bend | Passes TIA/EIA 455-85 |
| Max. Load for Installation: | 600 lbs. |
| Max. Load for Long Term Application: | 135 lbs. |
| Proof Test: | 100 kpsi |

## Applicable Specifications and Agency Compliance (Overall):

| | |
|---|---|
| **Applicable Standards:** | |
| Other Specification | RUS PE-90 Listed |
| **Suitability:** | |
| Suitability - Outdoor | Excellent |
| Suitability - Aerial | Fair |
| Suitability - Burial | Excellent |
| Sunlight Resistance | High |
| **Plenum/Non-Plenum:** | |
| Plenum (Y/N) | N |

## Optical Characteristics (Overall):

| | |
|---|---|
| Maximum Attenuation @ 1310nm | 0.35 |
| Maximum Attenuation @ 1550nm | 0.25 |
| Point Loss @ 1310 & 1550nm | 0.1 |
| Dispersion @ 1310nm | < 3.5 |
| Dispersion @ 1550 nm | |
| Dispersion Slope | 0.092 |
| Zero Dispersion Wavelength | 1300 - 1322 |
| PMD | |
| PMD (ps/nm-km ) | |

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| | |
|---|---|
| Cutoff Wavelength (< 0.5) | < 1260 |
| Refractive Index @ 1310nm | 1.466 |
| Refractive Index @ 1550nm | 1.467 |

Revision Number: 1 Revision Date: 05-14-2007

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